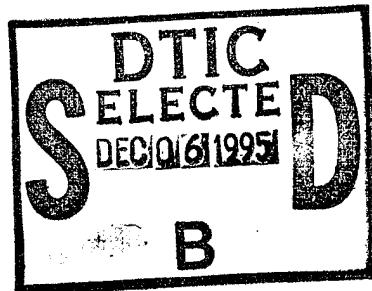


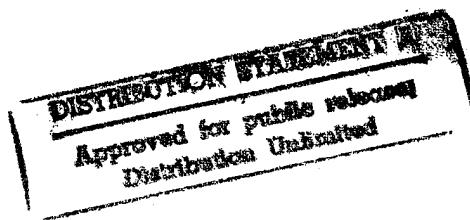
Logistics Management Institute

Streamlining Property Disposal for the Department of Health and Human Services

HS302MR1



Ken Goldman



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| 13. ABSTRACT (Maximum 200 words) Federal Property Management Regulations prescribe procedures for disposing of serviceable government equipment and furniture that is no longer needed. The procedures are intended to protect the government's interests in assets having remaining useful service life and inherent residual value. However, in protecting its interests, disposal process cycle times are often increased. Asset productivity can be degraded and holding costs can be unnecessarily increased. From 1983 - 1992, the Department of Health and Human Services (HHS) used the General Services Administration's (GSA's) Personal Property Center (PPC) to reduce its disposal process cycle times. The PPC accepted office furniture from HHS Operating Divisions (OPDIVs) and agencies. In 1993, however, GSA proposed to charge user fees for this service. HHS declined to participate in the GSA user fee program and established its own furniture consolidation point instead. In making these decisions, HHS identified a need for disposal planning and disposal decision support tools. The issue of PPC user fees created two questions. First, which furniture disposal process is the better value for HHS — the one relying on the use of the PPC for a fee, or the one created by HHS to avoid PPC user fees? Second, is the better of the two furniture disposal processes a model for the overall HHS disposal program of the future and if not, what is? This report develops a model for evaluating redistribution and/or disposal and the costs of holding, transferring, destroying, and/or processing excess assets for abandonment. The model permits the comparison of the likely total disposal cost of an item versus the likely benefit to be received if redistribution can be accomplished. It also enables assessment of the impact of alternative disposal strategies on meeting disposal process objectives. Using cost and benefit estimates, the decision support model is demonstrated. This report recommends that HHS include among its property management goals the establishment of the principle that property disposal decision-making is to be made on the basis of expected values rather than on arbitrary reportable item designations currently specified in the FPMR. | | | |
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Streamlining Property Disposal for the Department of Health and Human Services

EXECUTIVE SUMMARY

Federal Property Management Regulations (FPMRs) prescribe procedures for disposing of serviceable government equipment and furniture that is no longer needed. The procedures, followed by the Department of Health and Human Services (HHS), are intended to protect the government's interests in assets having remaining useful service life and inherent residual value. However, in protecting its interests, the disposal process risks lengthening the time required to dispose of excess assets to the point where inventory holding and administrative costs exceed the asset's residual value.

To avoid holding obsolete assets too long, the decision to dispose of them must consider the likelihood that the residual value of the asset will be recovered. Through the use of expected value concepts and simple payoff tables, we designed a method for making disposal decisions and evaluating disposal strategy alternatives for excess assets. The method very explicitly places cost-effectiveness at the center of the excess disposal decision-making process. Once the ascendancy of cost-effectiveness is established through use of the model described in this report, recommendations for streamlining the HHS disposal program come readily into view. We recommend that HHS do the following:

- ◆ As a property management goal, establish the principle that property disposal decision-making should be made on the basis of property expected values rather than on arbitrary, reportable item designations presently specified in the FPMR.
- ◆ Develop guidance for operating divisions and agencies that base disposal decision-making for nonreportable items on expected value concepts.
- ◆ Work with the General Services Administration to revise the FPMR to incorporate the use of expected values as a technique to replace reportable item designations wherever feasible.
- ◆ Develop guidance for the collection and use of cost data for the purposes of making disposal decisions and evaluating disposal process strategy alternatives.
- ◆ Integrate expected value concepts into in-house automated property management and disposal systems.

- ◆ Expand the use of computer bulletin boards for the dissemination of asset availability information.
- ◆ Develop a set of performance measures for selected disposal objectives and track their accomplishment through disposal operations. Include among those performance measures excess property disposal cycle times, excess property on hand that awaits disposition, and holding costs incurred. In this regard, HHS must be willing to consolidate its storage facilities to avoid costs that the space savings realized through streamlined property disposal decision-making permits.

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Streamlining Property Disposal for the Department of Health and Human Services

INTRODUCTION

About 500,000 items are listed in the Department of Health and Human Services' (HHS') personal property inventory records, and the acquisition cost of the entire inventory is approximately \$1.5 billion. Items such as office furniture, complex medical devices, and sophisticated laboratory apparatus, are entered in inventory records when they are acquired from commercial and government sources outside HHS. While those items are recorded in the inventory as on-hand, they are used in the performance of HHS missions. They are also accounted for — counted, safeguarded, maintained, stored, and transferred to other HHS users to perform other HHS missions. When property items are no longer usable or no longer needed, steps are taken to dispose of them and remove them from the inventory records.

Property is removed from HHS inventory records in one of three ways depending on its serviceability. If items are lost or stolen, they are removed from inventory records using report-of-survey procedures. If they are worn out or if they have been destroyed, the cause of the wear or destruction is documented and the items are dropped from inventory records as scrap or solid waste. Finally, when an item is believed to have no further use to HHS yet remains serviceable or can be economically repaired, it is declared excess to HHS needs. Once declared excess, the property is eligible to exit HHS inventory records via the property disposal process. Property disposal results in the transfer of property to another user or in its transformation into surplus property. Surplus property, in addition to being transferable, can also be donated, sold, abandoned, or destroyed.

BACKGROUND

From 1983 to 1993, HHS operating divisions (OPDIVs) and agencies located in the Washington, D.C., metropolitan area disposed of their excess office furniture by transferring it to the General Services Administration's (GSA's) Personal Property Center (PPC) in Franconia, Va. The PPC needed the excess furniture as raw material for its furniture restoration program. HHS, however, used the PPC primarily because it reduced the amount of time they had to store unneeded but serviceable furniture. OPDIV and agency property managers were able to empty their warehouses of unwanted furniture in three to four weeks after it

was declared excess, whereas six months or more could be required if procedures mandating centralized disposal approval were followed.

The PPC was convenient. It provided an abbreviated and legal alternative to more time consuming, formal excess reporting procedures. By virtue of its acceptance of the property, the PPC assumed responsibility for protecting the government's interest in assets having remaining service life. It relieved OPDIVs and agencies of this responsibility. Furniture accepted by the PPC was eventually transferred to other Federal agencies or it was donated, sold, scrapped, destroyed, or turned over to solid waste service contractors. However, the PPC performed that work, not the OPDIVs and agencies.

The OPDIVs and agencies also saw use of the PPC as being relatively inexpensive. They simply scheduled an appointment to turn in excess furniture and then kept the appointment. Although they were neither paid nor granted credit for the residual value of the furniture, their only expense was to transport it to the PPC. No other out-of-pocket expenses were incurred.

Prior to 1992, GSA operated the PPC using revenues generated from the sale of three products and/or services — restored furniture, interior design services featuring restored furniture, and surplus furniture. However, in 1992, when budget pressures increased and operating deficits were projected (\$1.2 million in FY93 and \$1.5 million in FY94), GSA began searching for additional ways to finance PPC operations.¹ It began by asking its Federal government customers for funds. On behalf of its OPDIVs and agencies, HHS paid GSA \$25,000 for use of the PPC during FY93.

However, for FY94, GSA proposed three different alternatives:

- ◆ Customers could reimburse the PPC at a rate per agency full-time equivalent (FTE). The rate per FTE would be sufficient to offset projected PPC operating deficits. The initial rate was estimated at between \$6.30 and \$16.00 per FTE, depending on the level of Federal agency participation in the plan.²
- ◆ Customers could reimburse the PPC for its administrative and rent costs. Rent costs would be based on space actually used by each customer agency while administrative costs would be allocated on a proportional basis.
- ◆ The PPC could be closed. GSA would provide disposal support at customer locations. For example, GSA personnel would conduct surplus sales at HHS storage facilities.

Within HHS, a consensus developed that the cost of the first two alternatives, each initially estimated at over \$150,000 annually, outweighed the convenience provided by the quick turn-in of excess assets. Instances of poor PPC

¹Since the PPC was not authorized in legislation, budget appropriations were not sought.

²The rate was eventually to be set at \$2.70 per FTE.

service such as long waits to unload furniture and inaccurate paperwork reinforced the feeling. As a result of these perceptions, HHS decided against participating in any plan to reimburse the PPC. Effectively, HHS selected GSA's third alternative — disposal support at customer locations.

The decision not to pay for PPC services was expected to result in increased OPDIV and agency excess furniture holding time. To soften the impact of any increase, HHS established a furniture consolidation point. Furniture that would have been transferred to the PPC is now collected and held at an HHS operated consolidation point until such time as it is reused or until GSA provides turn-in or other disposition instructions. An HHS work group identified an HHS storage facility in Springfield, Va., for use as the consolidation point.

By establishing the furniture consolidation point, HHS essentially created its own PPC. It believes that it will receive greater value from its consolidation point than from a user-fee-supported PPC operated by GSA. However, uncertainty surrounded the decision when it was first made and continues to surround it now. The uncertainty adds urgency to HHS's acute need to develop a cost-effective, responsive, and manageable property disposal program — a need that has existed for a long time, predating the proposal to impose PPC user fees.

The issue of PPC user fees has created two related but as yet unanswered questions: First, which furniture disposal process is the better value for HHS — the one relying on the use of the PPC for a fee, or the one created by HHS to avoid PPC user fees? Second, is the better of the two furniture disposal processes a model for the overall HHS disposal program of the future and if not, what would be best? To answer these questions, we first identify and review the objectives of the property disposal system. We then develop a model for assessing the degree to which alternative disposal processes meet those objectives.

PROPERTY DISPOSAL PROCESS OBJECTIVES

Each year for the past several fiscal years, HHS OPDIVs and agencies have classified between 5 and 20 percent of the value of their personal property as excess to their needs. In FY92, about 12,000 items originally acquired at a cost of \$77.7 million were declared excess. Since excess property is, by definition, serviceable or repairable and of considerable value, HHS has an obligation to protect the government's interest in that property until it is removed from inventory records in accordance with Federal Property Management Regulations (FPMRs).

To protect their interests in the unwanted assets, property managers first search for another user within HHS. If another user cannot be found within HHS, the excess declaration is made. However, in protecting the government's interest in the assets, property managers are obligated to continue the search for another user. The search for another user continues when the availability of the excess property is reported to GSA and, in turn, to other organizations outside HHS. HHS retains accountability and custody of excess material while its availability is being reported to GSA and while GSA markets its reutilization. HHS's

responsibility to hold, store, and continuously account for property comes to an end only when transactions to transfer, sell, abandon, or destroy it are finally completed in accordance with regulations.

The obligation to search for another user, both before and after excess declaration, requires that the property disposal process accomplish much more than just the elimination of unneeded property from HHS inventory records and warehouses. The property-disposal process must accomplish the following objectives:

- ◆ Stimulate the expeditious removal and collection of unneeded property from user offices, laboratories, hallways, and other work spaces, thus providing customer service and contributing to an uncluttered and productive working environment.
- ◆ Promote the redistribution of unrequired property within HHS, thus keeping serviceable material assets productively employed, saving the Department the cost of purchasing new property that might otherwise be required.
- ◆ With the participation of GSA, redistribute excess HHS property among Federal agencies, thus keeping serviceable material assets productively employed and saving the Federal government or even the donee or purchasing organization the cost of acquiring new property that might otherwise be required.
- ◆ Move excess property expeditiously from HHS warehouses thus saving holding costs.
- ◆ Report the availability of excess property prior to moving it, avoiding unnecessary handling and transportation costs.
- ◆ Provide eligible donees with surplus property when authorized.
- ◆ Market and sell surplus property, when appropriate, returning the proceeds to the Federal government or one of its agencies.
- ◆ Provide expeditious relief from accountability and record keeping requirements and costs.

To accomplish all these objectives in a balanced and optimal way, information about the excess material must flow to numerous points quickly and accurately. Assets must be quickly reported as available to targeted groups of potential users, reuse decisions must be made quickly, and action must be quickly taken to transfer assets among organizational elements and organizational accountable records. Since requirements are constantly changing, the processes used to redistribute and dispose of furniture tolerate very little delay and inaccuracy.

PROPERTY DISPOSAL PERFORMANCE

Unfortunately, the property disposal process does not now operate in the expeditious and accurate manner required to optimally achieve its multiple objectives. Instead, it operates using complex procedures mandated by the FPMRs in a hierarchically structured organization with many layers. As management emphasis has alternated between the competing performance objectives (e.g., high reutilization versus low transportation and holding costs or expeditious disposal versus high resale revenues), the authority to approve disposal of excess and surplus property has been increasingly centralized (especially for furniture). Regulatory complexity and centralized disposal approval authority have slowed the flow of information and material. Holding costs have increased while customer service has declined. Figure 1 depicts the flow of information and material throughout the organization during the property disposal process.

Beginning in the lower left corner of Figure 1, property not required by a user is made available to other users supported by the same custodial officer. Those other users, stimulated by the awareness of availability, assess their furniture or equipment needs and compare them to the available items. If they have requirements, they make a determination whether or not the available items will meet their needs. (Many potential users of available used property are skeptical of its reported condition. Their skepticism often causes them to decline acceptance of the available property.) If the property will meet their needs, a transfer of the asset is made. If not, the disposal process continues. Property not required by one custodial officer is then reported to an accountable officer and/or other custodial officers who screen the items to meet their requirements. The process of reporting availability, needs assessment, and requirements determination is repeated, using one scheme or another, concurrent and otherwise, at various organizational levels as disposal progresses. Eventually, a new user (or donee or buyer) is found or the process finally exhausts its search for a user. When a new user is found, the transfer of the property is approved. If the transfer is to an organization outside the HHS, the property will exit the HHS inventory. When the search for a user is unsuccessfully concluded, GSA provides disposition permitting the property to exit the HHS inventory via abandonment or destruction. Ironically, however, the process sometimes takes so long that property that was in a serviceable condition when the process began is unserviceable when it ends simply because of aging and/or the hazards of storage. When this happens, potential users lose confidence in the quality of products announced as available.

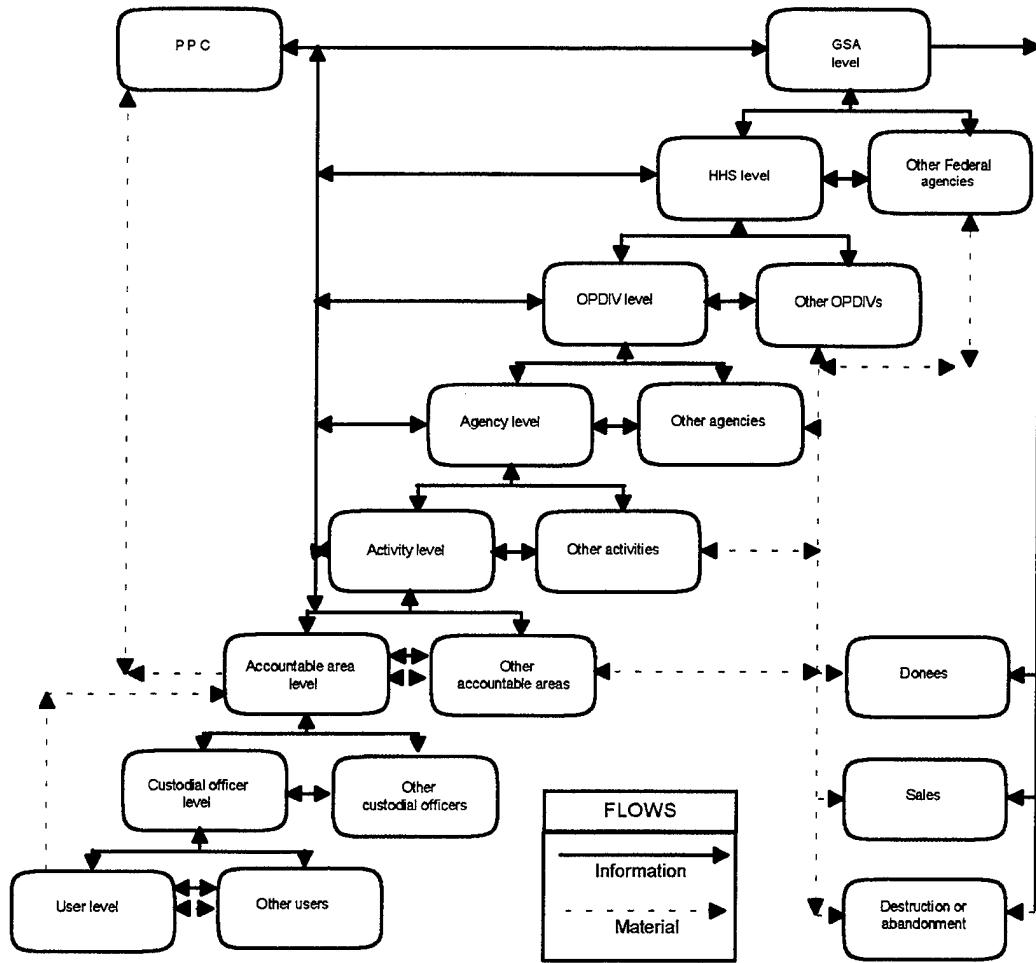


Figure 1.
Organization of the Property Disposal Process

The combination of a highly layered hierarchical setting; evolutionary, multifocused performance objectives; and procedural complexity has created a property disposal process that takes a long time to complete. Six-month process cycle times are the norm. Extended process cycle times can lower asset productivity and increase holding costs.

To increase asset productivity and reduce holding costs, excess property disposal process cycle times must be reduced. However, they must be reduced in ways that increase overall reuse rates and optimize holding periods, not in ways that sacrifice reuse rates or arbitrarily accelerate the write-off of the residual value of used property.

We believe that reducing disposal process cycle times can be accomplished by identifying excess items that have a relatively small chance of being reused. Reporting and screening of these items is likely to take time and be fruitless and

uneconomical. Disposal authority should be delegated to local property managers for those items. On the other hand, excess items that have a high chance of reuse should be more intensively marketed for redistribution. Concurrent screening of that property should be maximized. By using probability estimates, the methods for accomplishing these actions can be integrated with the methods used to evaluate disposal process alternatives.

EVALUATING DISPOSAL ALTERNATIVES

The way to reduce disposal cycle times, thereby increasing asset productivity and reducing holding costs, is to employ an asset disposal planning and decision-support model. The model requires information about assets being considered for redistribution and/or disposal and the costs of holding, transferring, destroying, and/or processing those assets for abandonment. Unfortunately, that kind of information is not readily available within the HHS. Nonetheless, it is essential for evaluation of alternative disposal processes. It permits the comparison of the likely total disposal cost of an item versus the likely benefit to be received if redistribution can be accomplished. It also enables assessment of the impact of alternative disposal strategies on meeting disposal processes objectives. Using assumed but reasonable estimates for costs and benefits, we demonstrate below how a decision support model would work.

Fundamentally, only five outcomes are possible for an item of serviceable property that an HHS user wants to have removed from his or her office or work area:

- ◆ The item can be classified as *unrequired* and available for transfer to another user within HHS.³
- ◆ It can be declared *excess* and available for transfer to another user in another Federal agency.⁴
- ◆ It can be declared *surplus* and available to be donated to an authorized recipient.⁵
- ◆ As surplus, it is available to be sold.
- ◆ As surplus, it can be abandoned or destroyed if no other users can be found.

³Unrequired personal property is any personal property under the control of an HHS OPDIV or agency that is not required for its own needs and the discharge of its responsibilities as determined by the head of the OPDIV or agency.

⁴Excess personal property is any unrequired personal property under the control of HHS that is not required for its needs and the discharge of its responsibilities, as determined by HHS.

⁵Surplus personal property is any excess personal property not required for the needs and the discharge of the responsibilities of all Federal agencies as determined by the Administrator of General Services.

The likelihood or probability of any one outcome occurring in any specific instance is determined by numerous factors. Some factors, such as marketing intensity, are controllable. Others, such as the existence of requirements, are not. The outcome of any proposed transfer or disposal is, therefore, often not known in advance. Because of this, disposal decisions involve risk — risk that the most cost-effective disposal strategy will not be chosen. Because of risk, the costs and benefits of many transfers or disposals cannot be calculated with certainty. Therefore, disposal decision-making must rely on expected values that take into account the probability of disposal outcomes; the differing costs and benefits associated with alternative disposal strategies; and, recalling from Figure 1 that the value of a disposal decision may depend upon one's organizational perspective, multiple points of view. Of course, from HHS's perspective, the best course of action is the one that maximizes return to, or minimizes costs for, HHS.

We demonstrate the complex interaction of uncertain disposal outcomes, the differing costs and benefits associated with alternative disposal strategies, and multiple organizational points of view. We use four payoff tables that compare three different disposal strategies. Other disposal strategies could have been developed for comparison but only three are needed to make our point. The three disposal strategies we compare are as follows:

- ◆ HHS holds property for a specified period of time on the chance that it will be able to redistribute it to another HHS user.
- ◆ The property is taken to the PPC where it is held for a specified time hoping to accomplish redistribution to another Federal agency user.
- ◆ The property is not held but is instead immediately declared surplus and is abandoned or destroyed.

The four pay-off tables reflect the five possible outcomes we enumerated above and the three different disposal strategies just described. They are portrayed from the view points of HHS and GSA. The tables indicate the probability of each outcome occurring. The method for selecting or setting these probabilities could be left to the discretion of senior property managers in each OPDIV or agency, or it could be set out in HHS or GSA policy. Fundamentally, the assignment of probabilities is subjective. Being subjective, however, probability estimation lends itself to empowerment and delegation of authority, practices well supported in the management literature.

The payoff tables also reflect the costs and benefits or incomes associated with each of the three disposal strategy alternatives. For example, in Table 1 the "HHS holds property" strategy estimates that \$200 in holding costs (20 percent of the assumed \$1,000 book value of an assumed asset) will be incurred regardless of the outcome. If the material is held only to be subsequently abandoned or destroyed, \$250 in costs will be accrued — the extra \$50 expense pays for costs to destroy or contract for the removal of the property. The table also shows that only a redistribution within HHS will result in HHS' benefit. The

benefit is based on the assumption that costs of \$1,000 to buy a similar piece of furniture are avoided when the property is transferred. Then the conditional value (CV) of each outcome is shown. Costs are simply subtracted from any benefit for each outcome and the result is recorded in the CV column. Finally, the probability estimates are applied to arrive at the expected value, probability [P(CV)], of the strategy — given the probabilities of each respective outcome and its associated costs, benefits, and CVs. As shown at the bottom of Table 1, the expected value of the “HHS holds property” disposal strategy is negative \$130. Selecting this strategy is expected to result in an expense to HHS of \$130. This expected expense is to be compared with the expected value of each of the other disposal strategy alternatives to determine the course of action most suitable for meeting HHS objectives.

Table 1.
Property Disposal Payoff Table from the HHS Point of View

| Outcome/ event | Prob- ability (%) | HHS OPDIV/agency point of view | | | | | | | | | | | |
|---|-------------------------|--------------------------------|---------------------|------------|---------------|---------------------------|---------------------|------------|---------------|-----------------------------------|---------------------|------------|---------------|
| | | Disposal strategies | | | | | | | | | | | |
| | | HHS holds property | | | | Property transfers to PPC | | | | Surplus abandoned or destroyed | | | |
| | | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) |
| Abandon or destroy | 60 | 250 | 0 | (250) | (150) | 20 | 0 | (20) | (12) | 50 | 0 | (50) | (30) |
| Transfer within HHS | 10 | 200 | 1,000 | 800 | 80 | 20 | 0 | (20) | (2) | 0 | 0 | 0 | 0 |
| Transfer to other Federal agency | 10 | 200 | 0 | (200) | (20) | 20 | 0 | (20) | (2) | 0 | 0 | 0 | 0 |
| Donate surplus | 10 | 200 | 0 | (200) | (20) | 20 | 0 | (20) | (2) | 0 | 0 | 0 | 0 |
| Sell surplus | 10 | 200 | 0 | (200) | (20) | 20 | 0 | (20) | (2) | 0 | 0 | 0 | 0 |
| Total | 100 | Expected value | | | (130) | Expected value | | | (20) | Expected value | | | (30) |

Next, we examine the “Property transfers to PPC” strategy. In this case, the cost to HHS reflects only the value of transporting the property to the PPC. No cost avoidance or income/benefit accrues to HHS. CVs are calculated and the expected value of the strategy is computed. In this case, disposal results in an expected \$20 in costs to HHS. This far lower expected cost is an obvious improvement over the strategy where HHS holds the material. It also explains why HHS OPDIVs and agencies prefer the PPC strategy and view user fees with disfavor. The negative \$20 expected value is also an improvement over the third disposal strategy — “Surplus abandoned or destroyed” by the OPDIV/agency — which carries an expected cost of \$30 to HHS.

On the basis of the example provided in Table 1, the conclusion might be drawn that use of the PPC for all items is the best course of action for HHS. However, this would be an erroneous generalization. The likelihood of each outcome and the costs and benefits of each disposal strategy can change with each item or group of items considered for disposal.

Our model considers revisions to probability estimates and examines the impact of such changes on calculated expected values and, therefore, on the desirability of alternative disposal strategies. Revised probability estimates are shown in Table 2. As can be seen in Table 2, the revisions change the preferred strategy. Comparing the expected values of each of the disposal alternatives, it now appears more attractive for HHS to hold the material rather than ship it to the PPC or immediately declare it surplus for the purpose of facilitating its abandonment or destruction. Obviously, as the probability of redistributing the material within HHS increases, the cost-effectiveness and desirability of the "HHS holds property" strategy increases relative to the other strategies.

Table 2.
Property Disposal Payoff Table from the HHS Point of View

| Outcome/ event | Prob- ability (%) | HHS OPDIV/agency point of view | | | | | | | | | | | |
|--|-------------------------|--------------------------------|---------------------|------------|---------------|---------------------------|---------------------|------------|---------------|-----------------------------------|---------------------|------------|---------------|
| | | Disposal strategies | | | | | | | | | | | |
| | | HHS holds property | | | | Property transfers to PPC | | | | Surplus abandoned or destroyed | | | |
| | | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) |
| Abandon or destroy | 20 | 250 | 0 | (250) | (50) | 20 | 0 | (20) | (4) | 50 | 0 | (50) | (10) |
| Transfer within HHS | 20 | 200 | 1,000 | 800 | 160 | 20 | 0 | (20) | (4) | 0 | 0 | 0 | 0 |
| Transfer to other Federal agency | 20 | 200 | 0 | (200) | (40) | 20 | 0 | (20) | (4) | 0 | 0 | 0 | 0 |
| Donate surplus | 20 | 200 | 0 | (200) | (40) | 20 | 0 | (20) | (4) | 0 | 0 | 0 | 0 |
| Sell surplus | 20 | 200 | 0 | (200) | (40) | 20 | 0 | (20) | (4) | 0 | 0 | 0 | 0 |
| Total | 100 | Expected value | | | (10) | Expected value | | | (20) | Expected value | | | (10) |

Recalling the HHS concern about whether or not the right thing was done in establishing its furniture consolidation point, the answer appears to depend on whether or not it will increase internal HHS furniture redistributions. If there is an increase, then HHS has chosen the economical course of action. The early results from furniture consolidation point operations suggest that redistributions within HHS are indeed increasing.

Next, we consider the impact of differing organizational perspectives on disposal strategy selection. We demonstrate these impacts again using payoff

tables as the model. Table 3 revises the information in Table 1 to reflect the GSA or Federal government point of view. An examination of the three expected values in Table 3 indicates that it now appears more attractive from the point of view of GSA to have HHS hold the property rather than ship it to the PPC or quickly abandon or destroy it. Obviously, however, HHS would disagree since it does not receive the income shown. It incurs the costs, but the income is remitted to the U.S. Treasury rather than to HHS operating accounts.⁶ The difference of opinion is created by differing recognition of costs and benefits. HHS recognizes cost avoidance or income only in the case of redistributions within HHS. GSA, on the other hand, recognizes cost avoidance for any redistribution or sale no matter who is required to store the material and incur holding costs while it is being screened.

Table 3.
Property Disposal Payoff Table from the GSA Point of View

| Outcome/ event | Prob- ability (%) | GSA/Federal government point of view | | | | | | | | | | | |
|----------------------------------|-------------------------|--------------------------------------|---------------------|------------|---------------|---------------------------|---------------------|------------|---------------|-----------------------------------|---------------------|------------|---------------|
| | | Disposal strategies | | | | | | | | | | | |
| | | HHS holds property | | | | Property transfers to PPC | | | | Surplus abandoned or destroyed | | | |
| | | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) |
| Abandon or destroy | 60 | 250 | 0 | (250) | (150) | 270 | 0 | (270) | (162) | 50 | 0 | (50) | (30) |
| Transfer within HHS | 10 | 200 | 1,000 | 800 | 80 | 220 | 1,000 | 780 | 78 | 0 | 0 | 0 | 0 |
| Transfer to other Federal agency | 10 | 200 | 1,000 | 800 | 80 | 220 | 1,000 | 780 | 78 | 0 | 0 | 0 | 0 |
| Donate surplus | 10 | 200 | 0 | (200) | (20) | 220 | 0 | (220) | (22) | 0 | 0 | 0 | 0 |
| Sell surplus | 10 | 200 | 100 | (100) | (10) | 220 | 0 | (120) | (12) | 0 | 0 | 0 | 0 |
| Total | 100 | Expected value | | | (20) | Expected value | | | (40) | Expected value | | | (30) |

Finally, we again revise outcome probability estimates. The impact of these changes on calculated expected values and therefore on the desirability of each of the disposal strategies is shown in Table 4. Again, our example suggests that GSA would prefer that HHS hold excess furniture pending its ultimate disposition. For HHS to participate in this strategy, GSA should be willing to expeditiously screen material to minimize HHS holding costs. GSA should also be willing to delegate the authority to make disposal decisions to HHS for those items having only a small probability of being redistributed. By working together to foster timely disposal strategy decision-making, GSA and HHS can

⁶We have been advised that changes to permit revenues to flow back to the excess reporting agency have been approved or are in the process of approval.

accomplish the many objectives of the property disposal process in a balanced and optimal way.

Table 4.
Property Disposal Payoff Table from the GSA Point of View

| Outcome/ event | Prob- ability (%) | GSA/Federal government point of view | | | | | | | | | | | |
|---|-------------------------|--------------------------------------|---------------------|------------|---------------|---------------------------|---------------------|------------|---------------|-----------------------------------|---------------------|------------|---------------|
| | | Disposal strategies | | | | | | | | | | | |
| | | HHS holds property | | | | Property transfers to PPC | | | | Surplus abandoned or destroyed | | | |
| | | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) | Cost (\$) | In- come (\$) | CV (\$) | P(CV) (\$) |
| Abandon or destroy | 20 | 250 | 0 | (250) | (50) | 270 | 0 | (270) | (54) | 50 | 0 | (50) | (10) |
| Transfer within HHS | 20 | 200 | 1,000 | 800 | 160 | 220 | 1,000 | 780 | 156 | 0 | 0 | 0 | 0 |
| Transfer to other Federal agency | 20 | 200 | 1,000 | 800 | 160 | 220 | 1,000 | 780 | 156 | 0 | 0 | 0 | 0 |
| Donate surplus | 20 | 200 | 0 | (200) | (40) | 220 | 0 | (220) | (44) | 0 | 0 | 0 | 0 |
| Sell surplus | 20 | 200 | 100 | (100) | (20) | 220 | 100 | (120) | (24) | 0 | 0 | 0 | 0 |
| Total | 100 | Expected value | | | 210 | Expected value | | | 190 | Expected value | | | (10) |

CONCLUSIONS

After the introduction, we began our discussion by identifying the multiple, often competing, objectives that characterize the property disposal process. We indicated that these objectives, when coupled with a highly layered hierarchical organization and complex regulations, contributed to the centralization of disposal approval authority. In turn, centralized approval authority has resulted in extended disposal process cycle times. Increased cycle times degrade asset productivity and increase holding costs.

One method for decentralizing disposal approval, thereby accelerating process cycle times, is to identify those property items for which extensive screening is likely to be fruitless and uneconomical. Disposal authority should be delegated for those items. As an aid to differentiating among those items for which disposal authority should be delegated and those items for which it should not, we have demonstrated an asset disposal planning and decision-support model. This model can be used to provide the expected value of disposal decisions under varying scenarios. The model can point to economical disposal decisions. It can be used to identify items for which disposal authority should be delegated. It permits management to concentrate on those property items likely to pay the largest returns. Having evaluated the property disposal strategy alternatives in

the demonstration of our model, we return to the two related but unanswered questions generated by the PPC user fees proposal.

The first question was: Which furniture disposal process is the better value for HHS – the one relying on the use of the PPC for a fee, or the one created by HHS to avoid PPC user fees? The answer: it depends. Either could be of value, depending upon the items considered, the relative operating costs involved, the accounting rules used to recognize costs and benefits, and the frequency with which a specific disposal outcome is likely to occur.

The second question was: Is the better of the two furniture disposal processes the model for the overall HHS disposal program of the future or, if not, what is? The answer is: as our evaluation of disposal strategies suggests, property disposal is a complex undertaking requiring up-to-date information about costs and likely benefits. Unfortunately, HHS is largely unaware of the economic penalty it incurs because of the extended disposal process cycle times. It does not routinely measure disposal process performance nor does it collect disposal process costs in a usable form. The HHS needs to improve its awareness of costs related to property disposal. A sound appreciation for such costs as storage space rental costs, labor and transaction costs, holding costs, and a willingness to make disposal decisions that optimize disposal expected values is important. Furthermore, HHS needs to communicate information about unrequired, excess, and surplus assets much more quickly and effectively. Such information is critical to reducing disposal process cycle times while optimally accomplishing disposal objectives for the benefit of the U.S. taxpayer. The model we have demonstrated, albeit in a simplistic way, is capable of performing as the HHS disposal decision-making program of the future.

RECOMMENDATIONS

The FPMRs require that selected property items be reported to GSA when they are declared excess. Such items are, logically enough, designated as reportable items. The criteria used to select an item or a class of items and designate them as reportable are not always based on economics. Furniture items are designated as reportable items. They are reportable items because instances have been found within the Federal government where new furniture was purchased when serviceable, used furniture was available. The FPMR solution to such problems was to centralize the approval of both new furniture purchases and excess furniture disposals. Under such an arrangement purchases are to be controlled and disposals are to be avoided. Unfortunately, these controls have had some undesirable effects. As we have stated, disposal process cycle times have been extended. Furthermore, it is not clear that "directed" redistributions have had the desired effect of reducing furniture purchases and avoiding furniture disposals. Part of the difficulty rests in the fact that current mandates are overly generalized and fail to consider the aesthetic and "status" attributes of furniture. As a consequence purchasing and disposal restrictions are "gamed" and frequently avoided. Therefore, a fresh approach is required.

In this document, we provide such an approach. The approach is usable within HHS for nonreportable items and, with the coordination and approval of GSA, within the Federal government for reportable items. The approach is item- and transaction-oriented and, as such, requires automation support. Its also depends upon the ready availability of cost and asset information. We envision, as such legislation as the Chief Financial Officers Act, the Federal Managers Financial Integrity Act, and the Government Performance and Results Act is implemented, that information and collection systems will be more conveniently available. In anticipation of implementation and in consonance with the need to streamline HHS disposal processes, we recommend that HHS do the following:

- ◆ Include among its property management goals the establishment of the principle that property disposal decision making is to be made on the basis of expected values rather than on arbitrary reportable item designations presently specified in the FPMR,
- ◆ Develop guidance for OPDIVs and agencies that base disposal decision making for nonreportable items on expected value concepts,
- ◆ Work with GSA to revise the FPMR to incorporate the use of expected values as a technique to replace reportable item designations wherever feasible,
- ◆ Develop guidance for the collection and use of cost data for the purposes of making disposal process strategy decisions,
- ◆ Integrate expected value concepts into its automated property management and disposal systems,
- ◆ Expand the use of computer bulletin boards for the dissemination of asset availability information, and
- ◆ Develop a set of performance measures for the disposal objectives described above and track their accomplishment through disposal operations. Include among them excess property disposal cycle times, excess property on hand that awaits disposition, and holding costs incurred. In this regard, HHS must be willing to consolidate its storage facilities to avoid costs that the space savings realized through streamlined disposal decision-making permits.